

Date: Sun, 15 May 94 04:30:25 PDT
From: Ham-Homebrew Mailing List and Newsgroup <ham-homebrew@ucsd.edu>
Errors-To: Ham-Homebrew-Errors@UCSD.Edu
Reply-To: Ham-Homebrew@UCSD.Edu
Precedence: Bulk
Subject: Ham-Homebrew Digest V94 #129
To: Ham-Homebrew

Ham-Homebrew Digest Sun, 15 May 94 Volume 94 : Issue 129

Today's Topics:

 80 Nanosecond Access EPROM - 27C512
 European Phone Line Specs???

 GOPHER archives for rec.radio.amateur.[antenna|homebrew],QRP
 Help w/ 'RF Design' Magazine article 1/88 issue
 Philips "Dream Machine" 8XC750 design contest (2 msgs)
 Receiver Sony ICF-SW7600 Mod (2 msgs)
 SEARCHING FOR LOW POW
 Ten-Tec 1208 transverter kit - schedule update
 UHF Power amps.
 Walkie-talkie for data transfer

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Homebrew Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: Fri, 13 May 1994 15:59:43 GMT
From: ihnp4.ucsd.edu!dog.ee.lbl.gov!agate!howland.reston.ans.net!spool.mu.edu!
torn!news.unb.ca!upei.ca!UPEI.CA!seeler@network.ucsd.edu
Subject: 80 Nanosecond Access EPROM - 27C512
To: ham-homebrew@ucsd.edu

Hi Just a quick note to see if anyone knows of an American distributor for
fast access 27C512 EPROMs - (80 Nanoseconds). One manufacturer is Advanced
Microdevices (AM27C512-75DC) BUT no Canadian Company has these in stock and
those who usually carry them have a minimum order of 50 units etc.

I would appreciate it if someone could point me to electronic distributors
in the US who may carry this item. a non-800 number or location would

help me contact the company.

Thanks in advance - Dave, VY2DCS
Internet: Seeler@upei.ca

Date: 14 May 1994 16:24:14 GMT
From: ihnp4.ucsd.edu!dog.ee.lbl.gov!agate!howland.reston.ans.net!
europa.eng.gtefsd.com!emory!news-feed-2.peachnet.edu!hobbes.cc.uga.edu!
aisun3.ai.uga.edu!mcovingt@network.ucsd.edu
Subject: European Phone Line Specs???
To: ham-homebrew@ucsd.edu

In article <francis4-040594110947@dfrancis.apple.com> francis4@applelink.apple.com
(Dexter Wm. Francis) writes:

>The ARRL Handbook has a section that details the available range of voltage
>and current on U.S. phone lines. Does anyone know what the numbers are for
>phone systems in Europe?

My understanding is that they are about the same; comp.dcom.telecom would
know for sure.

--
< Michael A. Covington, Assc Rsch Scientist, Artificial Intelligence Programs >
< The University of Georgia, Athens, GA 30602-7415 USA mcovingt@ai.uga.edu >
< Unless specifically indicated, I am not speaking for the University. > <><
For information about any U.Ga. graduate program, email gradadm@uga.cc.uga.edu.

Date: 14 May 1994 23:54:52 GMT
From: ihnp4.ucsd.edu!swrinde!gatech!concert!bigblue.oit.unc.edu!sunSITE!
modena@network.ucsd.edu
Subject: GOPHER archives for rec.radio.amateur.[antenna|homebrew],QRP
To: ham-homebrew@ucsd.edu

Advisory on GOPHER-accessible archives of:

rec.radio.amateur.antenna

rec.radio.amateur.homebrew

QRP@Think.com

Subject-threaded articles from the above mentioned topics can be read
via GOPHER (and presumably MOSIAC and WWW). Individual articles can

be retrieved via the built-in email mailer (press 'm' to pop the menu).

One can assess these archives in one of two ways:

1. Via your local GOPHER client
2. Telnet to the public GOPHER server at SunSITE.

At the present time, simple FTP access to these archives is not possible.

1. Use the following profile to point your local GOPHER client to the appropriate part of sunsite.unc.edu:

```
+-----+
#
Type=1+
Name=Electronics & Computers
Path=1/../../pub/academic/agriculture/agronomy/electronics+computers
Host=calypso-2.oit.unc.edu.
Port=70
Admin=Jonathan Magid and Simon Spero, 919-962-9107 <ftpkeeper@sunsite.unc.edu>
ModDate=Sat May 14 16:54:22 1994 <19940514165422>
URL: gopher://calypso-2.oit.unc.edu.:70/11/../../pub/academic/agriculture/
    agronomy/electronics+computers
+-----+
```

NOTE: The URL: line was too long to send on Usenet. Join the line subsequent to the URL: line back to the URL: line before putting the profile item in your .link file.

The GOPHER directory will look like this:

Internet Gopher Information Client 2.0 pl11
Electronics & Computers

1. Ham Radio Callbook Server - SUNY at Buffalo <TEL>
- > 2. Archives of rec.amateur.radio.ANTENNAS /
3. Archives of rec.radio.amateur.HOMEBREW /
4. Archives of QRP ... threaded from Think.com /
5. Archives of sci.ELECTRONICS /
6. other HAM RADIO related items /
7. OS2: an FAQ, the IBM Gopher and other trivia /
8. COLEM /
9. NEC /

2. TELNET to a GOPHER server (an example session)

```
>telnet sunsite.unc.edu
Trying 198.86.40.81 ...
Connected to sunsite.unc.edu.
Escape character is '^]'.
***** Welcome to SunSITE.unc.edu *****
SunSITE offers several public services via login. These include:
```

```
For a simple gopher client,          login as gopher
.....
```

```
Internet Gopher Information Client 2.0 pl11
Root gopher server: gopher.unc.edu
```

```
--> 5.  Worlds of SunSITE -- by Subject/
```

```
.....
```

```
Internet Gopher Information Client 2.0 pl11
Worlds of SunSITE -- by Subject
```

```
--> 3.  Browse All Sunsite Archives/
```

```
.....
```

```
Internet Gopher Information Client 2.0 pl11
Browse All Sunsite Archives
```

```
--> 8.  academic    software written by researchers in different disci.../
```

```
.....
```

```
Internet Gopher Information Client 2.0 pl11
academic    software written by researchers in different disciplines
```

```
--> 3.  agriculture  information about scientific farming, horti.../
```

```
.....
```

```
Internet Gopher Information Client 2.0 pl11
```

```
agriculture  information about scientific farming, horticulture, and .../
```

```
--> 3.  agronomy/
```

.....

Internet Gopher Information Client 2.0 pl11
agronomy

--> 8. Electronics & Computers /

.....

Internet Gopher Information Client 2.0 pl11
Electronics & Computers

- 1. Ham Radio Callbook Server - SUNY at Buffalo <TEL>
- > 2. Archives of rec.amateur.radio.ANTENNAS /
- 3. Archives of rec.radio.amateur.HOMEBREW /
- 4. Archives of QRP ... threaded from Think.com /
- 5. Archives of sci.ELECTRONICS /
- 6. other HAM RADIO related items /
- 7. OS2: an FAQ, the IBM Gopher and other trivia /
- 8. COLEM /
- 9. NEC /

--

73/Steve Modena/AB4EL MODENA@sunsite.unc.edu

ham-radio gopher advisory/version 1.0.0/14 May 94

Date: 14 May 1994 16:26:13 GMT
From: ihnp4.ucsd.edu!dog.ee.lbl.gov!agate!howland.reston.ans.net!gatech!news-feed-1.peachnet.edu!hobbes.cc.uga.edu!aisun3.ai.uga.edu!mcovingt@network.ucsd.edu
Subject: Help w/ 'RF Design' Magazine article 1/88 issue
To: ham-homebrew@ucsd.edu

If you are associated with a college or university, the obvious thing to do is order a Xerox copy through your library's interlibrary loan service. They will have another library find it, copy it, and send it to them for you.

Some public libraries also do this.

--

< Michael A. Covington, Assc Rsch Scientist, Artificial Intelligence Programs >
< The University of Georgia, Athens, GA 30602-7415 USA mcovingt@ai.uga.edu >
< Unless specifically indicated, I am not speaking for the University. > <><
For information about any U.Ga. graduate program, email gradadm@uga.cc.uga.edu.

Date: Thu, 12 May 1994 09:45:32 GMT
From: rde!gator!bilver!tous!ocelot!stardust!kc4zvw@uunet.uu.net
Subject: Philips "Dream Machine" 8XC750 design contest
To: ham-homebrew@ucsd.edu

There is a Philips Dream Machine 8XC750 design contest.

If you have ordered their DS-750 toolkit and have figured out what to do with it or are trying to figure out what to do with it, request to join the mail list that I have started.

To join send mail to the following (manual) mail server:

DS-750-request@stardust.oau.org

I received my development kit yesterday and am impressed with the contents. While it comes with a debugger, I wonder if any assembler or compiler for the 80C51 could be used with it?

I do not work for Philips or any semiconductor manufacturer.

best regards,

// David // (hardware hobbyist)

--

David Billsbrough
kc4zvw@stardust.oau.org

Date: 14 May 94 18:33:46 GMT
From: dog.ee.lbl.gov!agate!spool.mu.edu!darwin.sura.net!nuance.com!not-for-mail@ucbvax.berkeley.edu
Subject: Philips "Dream Machine" 8XC750 design contest
To: ham-homebrew@ucsd.edu

kc4zvw@stardust.oau.org (David Billsbrough) writes:

>I received my development kit yesterday and am impressed with the contents.
>While it comes with a debugger, I wonder if any assembler or compiler for
>the 80C51 could be used with it?
>// David // (hardware hobbyist)
>--
>David Billsbrough
>kc4zvw@stardust.oau.org

David,

According to Phillips IC20 Data Book on 80C51-Based microcontrollers,
in the 8xC751 overview

"PLEASE NOTE: The instruction set of the 83C751 is
identical to the 80C51 except for the instructions:
MOVX, LCALL, and LJUMP, which are not implemented.
Care must be taken not to use any of these instructions
in a user program, especially when using a high level
language such as C."

So if you're using an assembler, just avoid those instructions. If you
want to use a C, there *might* be a way to force your compiler to not
use the LCALL and LJUMP instructions. I use Franklin's C compiler, and
using the #pragma ROM(COMPACT) forces the compiler to use ACALL and
AJUMP.

Hope this helped.

Paul

```
+-----+
| Paul Durden      Cybex Corporation   cybex@nuance.com      |
| Product Engineer 4912 Research Drive |
| (205)430-4020 x234 Huntsville, AL  USA After June 1, 1994 |
| FAX: (205)430-4030 35805             Paul.Durden@mail.cybex.com |
+-----+
```

DISCLAIMER: The warped views and opinions are mine and do not reflect
the views and opinions of Cybex Corporation.

Date: 14 May 94 19:11:04 GMT

From: agate!howland.reston.ans.net!gatech!news-feed-1.peachnet.edu!

hobbes.cc.uga.edu!aisun3.ai.uga.edu!mcovingt@ucbvax.berkeley.edu

Subject: Receiver Sony ICF-SW7600 Mod

To: ham-homebrew@ucsd.edu

In article <2r33kq\$e3k@ohlone.kn.PacBell.COM> jlundgre@kn.pacbell.com (John
Lundgren) writes:

>

>DCG Mktg Docmnt (Ivrea) (archive@flash.ATC.Olivetti.Com) wrote:

>

>: I have bought the Sony model ICF-SW7600, European version; as an

>: HF, it receives from 3850 KHz to 26100 KHz, I would like to know,

>: if possible, if I can modify it to receive continuous from 500 KHz

>: to 30 MHz.

>

>On many HF radios, the lower frequency has a certain setting because just

>below it is the first IF frequency. If you try to lower the receiving

>frequency, the radio will just receive its own IF or local oscillator

>frequencies. The radio will oscillate or just won't work. If you look
>at the specifications for your radio, you may find that the first IF is
>not too far below the lowest receiving frequency, 3850 KHz.

Or he may find that the European version of this radio covers a narrower
version of frequencies than the American one and that he can convert it
into the American version by changing a jumper. I'm not at all sure
whether this is the case with the 7600, but it's worth looking up.

--
< Michael A. Covington, Assc Rsch Scientist, Artificial Intelligence Programs >
< The University of Georgia, Athens, GA 30602-7415 USA mcovingt@ai.uga.edu >
< Unless specifically indicated, I am not speaking for the University. > <><
For information about any U.Ga. graduate program, email gradadm@uga.cc.uga.edu.

Date: 14 May 1994 18:00:58 GMT
From: ihnp4.ucsd.edu!dog.ee.lbl.gov!agate!library.ucla.edu!csulb.edu!csus.edu!uop!
pacbell.com!ohlone.kn.PacBell.COM!jlundgre@network.ucsd.edu
Subject: Receiver Sony ICF-SW7600 Mod
To: ham-homebrew@ucsd.edu

DCG Mktg Docmnt (Ivrea) (archive@flash.ATC.Olivetti.Com) wrote:

: I have bought the Sony model ICF-SW7600, European version; as an
: HF, it receives from 3850 KHz to 26100 KHz, I would like to know,
: if possible, if I can modify it to receive continuous from 500 KHz
: to 30 MHz.

: Thank you

: Maurizio Chalp

: Please replay to maurizio@dirdoc.ico.olivetti.com

On many HF radios, the lower frequency has a certain setting because just
below it is the first IF frequency. If you try to lower the receiving
frequency, the radio will just receive its own IF or local oscillator
frequencies. The radio will oscillate or just won't work. If you look
at the specifications for your radio, you may find that the first IF is
not too far below the lowest receiving frequency, 3850 KHz.

--
@@
@ John Lundgren - Elec Tech - Info Tech Svcs @ STD DIS- @

@ Rancho Santiago Community College District @ CLAIMERS @
@ 17th St. at Bristol \ Santa Ana, CA 92706 @ APPLY... @
@ VOI (714) JOHN GAB \ FAX (714) JOHN FRY @ @
@ jlundgre@kn.pacbell.com \ jlundgr@eis.calstate.edu @ @
@@

Date: 14 May 94 22:24:00 GMT
From: dog.ee.lbl.gov!agate!iat.holonet.net!wwwswinc!art.harris@ucbvax.berkeley.edu
Subject: SEARCHING FOR LOW POW
To: ham-homebrew@ucsd.edu

@SUBJECT:Re: SEARCHING FOR LOW POWER FM TRANSMITTER for BROADCAST BAND
<2q6iqe\$jt看@engnews2.Eng.Sun.COM>

>Michael Miles (mbm1949@u.cc.utah.edu) wrote:
>: Rich Krinsky (rich@cmc) wrote:
>: : I am interested in designing an FM transmitter for broadcast in the FM
>band.
>: : The device will be digitally tuned (not with a screwdriver!).
>: : 1. Does anyone have any design information for such a product?

Contact: Pan-Com International
A Division of Pan-Axis Productions
P O Box 130
Paradise, CA 95967-0130
Tel: 916 534-0417

They have a variety of PLL (digitally tuned) FM exiter kits that run
anywhere from 1/2 to 10 watts, mono or stereo. You can buy plans only,
plans + PC board, complete kit, or assembled unit.

For example, their FME5 has the following specs:

Freq: 87 - 109 MHz in 25 kHz steps (PLL)
Output power: Adjustable up to 5 Watts
Spurious Outputs: -40 db
Audio Response: 20 - 90,000 Hz
Audio input: 600 ohms
Mode: Mono (stereo generator available)
RF output impedance: 50 to 75 ohms

The complete kit costs about \$200 less power supply & cabinet.
It requires +12 and -12 volts at 650 ma. Plans only are about \$25.

Art

Date: Fri, 13 May 1994 20:54:48 GMT
From: news.acns.nwu.edu!math.ohio-state.edu!usc!elroy.jpl.nasa.gov!swrinde!gatech!
newsfeed.pitt.edu!nntp.club.cc.cmu.edu!news.mic.ucla.edu!library.ucla.edu!
csulb.edu!csus.edu@ihnp4.ucsd.edu
Subject: Ten-Tec 1208 transverter kit - schedule update
To: ham-homebrew@ucsd.edu

As of today 5/13/94 Ten-Tec says of the 6M transverter kit that the manuals are
being proofread currently, and shipment expected 7/10 days from now.

E openings going a-wasting :-(

73 Dave WB0GAZ dgf@netcom.com

Date: Fri, 13 May 1994 11:58:31 GMT
From: library.ucla.edu!csulb.edu!nic-nac.CSU.net!usc!cs.utexas.edu!utnut!utcsri!
newsflash.concordia.ca!CC.UMontreal.CA!IRO.UMontreal.CA!clouso.crim.ca!
hobbit.ireq.hydro.qc.ca!@ihnp4.ucsd.edu
Subject: UHF Power amps.
To: ham-homebrew@ucsd.edu

In article 000D22C9@cs.adel.edu.au, jfk@cs.adel.edu.au (John Kavanagh) writes:
>Hi,
>
>Does anyone know of any good articles or books with practical circuits for the
>construction of power amps for 70cm.

In the Aug 1992, Electronics Now, p 67-70, there is an article on how to build a
2 to 10 watts UHF (ATV) Linear Amp. The transistor is an MRF 654.
I don't know if we can use it in fm?
Let me know if you find some others plans.
Good luck
73 de VE2HQJ, Clem.

Clement Vaillancourt, | Institut de Recherche d'Hydro-Quebec
Analyste, | Varennes, P. Quebec, Canada, J3X 1S1
Informatique scientifique | Tel:+1 514 652 8238 Fax:+1 514 652 8309
vaillan@ireq.hydro.qc.ca | Radio-amateur: VE2HQJ@VE2CRL.PQ.CAN.NA

Date: 14 May 1994 17:46:08 GMT
From: ihnp4.ucsd.edu!dog.ee.lbl.gov!agate!library.ucla.edu!csulb.edu!csus.edu!uop!
pacbell.com!ohlone.kn.PacBell.COM!jlundgre@network.ucsd.edu

Subject: Walkie-talkie for data transfer
To: ham-homebrew@ucsd.edu

You may get more responses by posting this to the
rec.radio.amateur.homebrew newsgroup.

The radio transmitter will need a modem between the data source and the microphone. Connect the serial data to the transmitter of the modem, and use a volume control to reduce the level. The modem puts out a tone that will work with the walkie talkie's microphone.

You didn't say how much data you will transmit, but it will be better and easier for the receiver if the data is transmitted slowly. The receiver will need the same kind of modem, connected to the speaker output. Older modems that run at 300 BPS or 1200 BPS should work. By the way, they put out sine waves, but the modulation can make the sine wave do some very strange things.

It sounds like you are trying to eliminate having another human being on the other end of the RF link. You could have a tape recorder connected to the receiver on the far end, and just speak the data into the microphone of the walkie talkie. Later, you could record all the data on your computer. This takes more time, but it might be more reliable. 2 Km is quite a long distance for a pair of walkie talkies to receive over.

Maybe you could use solar power if you are concerned about battery lifetime.

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@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@
@      John Lundgren - Elec Tech - Info Tech Svcs      @ STD DIS- @
@      Rancho Santiago Community College District      @ CLAIMERS @
@      17th St. at Bristol \ Santa Ana, CA 92706      @ APPLY... @
@      VOI (714) JOHN GAB \ FAX (714) JOHN FRY        @          @
@ jlundgre@kn.pacbell.com \ jlundgr@eis.calstate.edu @          @
@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@

```

Date: Thu, 12 May 1994 19:30:41 GMT
From: ihnp4.ucsd.edu!usc!math.ohio-state.edu!magnus.acs.ohio-state.edu!csn!
cherokee!walter!thumper!cotton@network.ucsd.edu
To: ham-homebrew@ucsd.edu

References <DEAN.94May5233722@splinter.coe.neu.edu>,
<2qlhja\$8fj@hopscotch.ksr.com>, <2qmj5s\$fj2@panther.msc.cornell.edu>r
Reply-To : cotton@thumper.bellcore.com (Chase Cotton)
Subject : Re: Help w/ 'RF Design' Magazine article 1/88 issue

Helfrick has a book on Spectrum Analyzers and a full hardware design.

ISBN: 0-12-338250-5
Helfrick, A.D.
Electrical Spectrum and Network Analyzers
Academic Press, Inc.

Chase

Chase Cotton

cotton@thumper.bellcore.com

End of Ham-Homebrew Digest V94 #129
